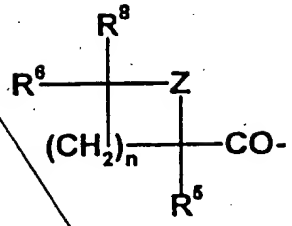
A' cont.



where n [is included between] ranges from 0 [and] to 8;

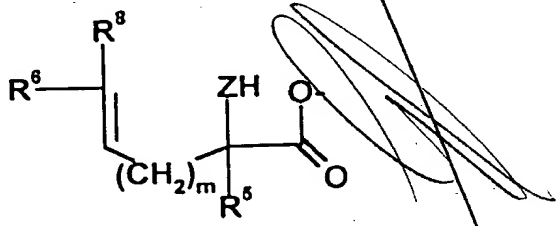
Z is oxygen, nitrogen or sulfur heteroatom;

R^5, R^6 and R^8 are independently hydrogen;

hydrocarbon radical, saturated, [insaturated] unsaturated or aromatic, linear or [ramified] branched and/or cyclic, [especially alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heterocycloalkyl, of said radical] optionally including [or not] heteroatom(s); R^6 and R^8 may be [included] present in a cycle;

oxygen ether bearing one of the former radicals;

- or to the following linear alkene formula;

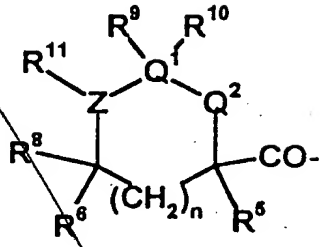


where m [is included between] ranges from 1 [and] to 8;

R^5, R^6 and R^8 are as defined above;

a' cont.

- or to the following formula;



where n, R^5, R^6 and R^8 are as defined above;

Z and Q^2 are independently oxygen, nitrogen or sulfur heteroatom;

Q1 is carbon, silicium or phosphorus atom;

R^9 and R^{10} are independently hydrogen, alkoxy, hydrocarbon radical, optionally including [or not] heteroatom(s), saturated, unsaturated or aromatic, linear or [ramified] branched and/or cyclic [,especially alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heterocycloalkyl];

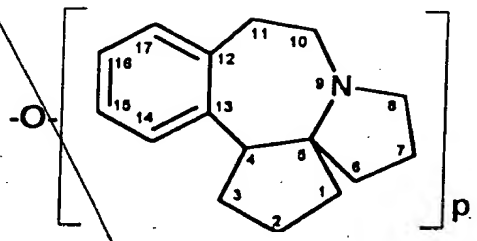
R^9 and/or R^{10} having the ability to be null or taken together to make an heteroatom and/or make a multiple bond with Q^1, R^9 and R^{11} having the ability to be null to make a multiple bond between the two atoms of carbon bearing them; and

R^{11} is hydrogen, arylcarbonyl, alkoxycarbonyl, aryloxycarbonyl or alkylcarbonyl;

where

A'cont.

-O-CTX is cephalotaxine moiety of the following formula or a salt thereof;



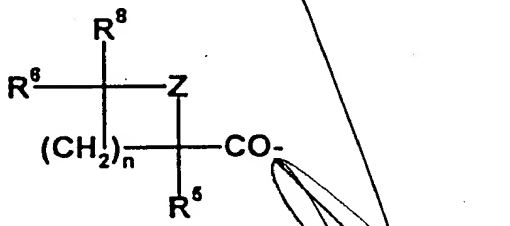
where p is equal to 1 or 2;

the two types of radicals -Ω and -CTX above-mentioned being bonded with an ester bond -CO-O-

the said process bringing together:

- either carboxylic acid with general formula Ω-CO-OH or a salt thereof;
- or an activated form of an acid with general formula Ω-CO-A or a salt thereof,

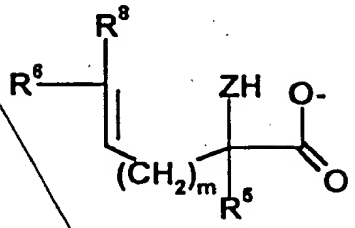
with Ω-CO of the following formula:



where n, Z, R^5, R^6 and R^8 are as defined above;

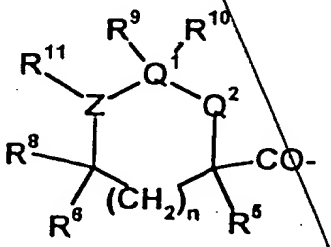
A' cont.

where Ω-CO of the following formula:



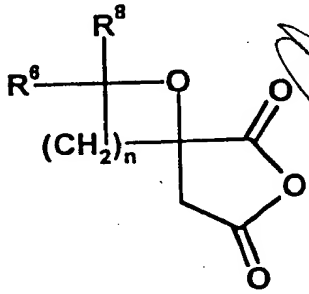
m [is included between] ranges from 1 [and] to 8, Z, R^5, R^6 and R^8 are as defined above;

where Ω-CO of the following formula:



where n, Z, Q^1, Q^2, R^5, R^6, R^8, R^9, R^{10} and R^{11} are as defined above A represents:

- either cyclic anhydride of the following formula:



where n, R^6 and R^8 are as defined above;

this reaction has been completed by methylation of the primary carboxyl thus formed, with:

- either a hydroxyl group bearing cephalotaxane or a salt thereof of the formula H-O-CTX, where CTX are as defined above;

- or a metallic alcoxide of the formula M-O-CTX, where CTX are as defined above and M is a metal;

- or an activated form of its hydroxyl group of the formula Y-O-CTX, where -O-CTX is as defined above and Y is, either a leaving group to allow a negative charge on oxygen atom by cleavage between Y- and -O-CTX, or to allow a carbocation by cleavage between Y-O- and -CTX;

with the possible presence of one or several reaction additives to form said sidechain-bearing cephalotaxane and/or a salt thereof.

Claim 4, line 1, delete "anyone of claims 1 to 3" and insert --claim 1--;

Claim 5, line 1, delete "anyone of claims 1 to 3" and insert --claim 1--;

Claim 6, line 1, delete "anyone of claims 1 to 5" and insert --claim 1--;

Claim 7, line 1, delete "anyone of claims 1 to 5" and insert --claim 1--;

Claim 9, line 1, delete "anyone of claims 1 to 8" and insert --claim 1--;

Claim 9, line 2, delete "where Ω is as defined according to claim 1";

Claim 10, line 1, delete "anyone of claims 1 to 8" and insert --claim 1--;

Claim 11, line 1, delete "anyone of claims 1 to 8" and insert --claim 1--;

Claim 12, line 1, delete "anyone of claims 1 to 8" and insert --claim 1--;

Claim 13, line 1, delete "anyone of claims 1 to 8" and insert --claim 1--;

Claim 15, line 1, delete "anyone of claims 1 to 8" and insert --claim 1--;

Claim 16, line 2, delete "as defined according to claim 1";

Claim 18, line 1, delete "previous claims" and insert --claim 1--;

Claim 18, lines 2-3, delete "such as tertiary amine for example";

Claim 20, line 1, delete "anyone of previous claims" and insert --claim 1--;

Claim 20, line 2, delete "is corresponding" and insert --corresponds--;

Claim 20, delete line 4;

Claim 20, delete line 7;

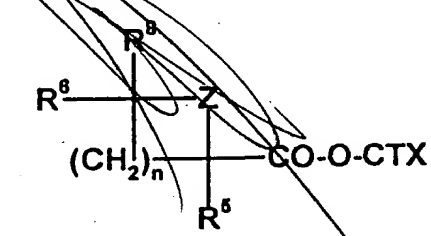
Claim 20, line 8, delete "himself";

21. (Amended) The process according to [anyone of claims 1 to 20] claim 1, wherein M is an alkaline metal [such as lithium, potassium or sodium].

Claim 22, line 1, delete "is";

Claim 23, line 1, delete "is";

24. (Amended) A sidechain-bearing cephalotaxane corresponding to the following formula and/or a salt thereof:



A3 cont.

where

n [is included between] ranges from 9 [and] to 8;

Z is oxygen, nitrogen or sulfur heteroatom;

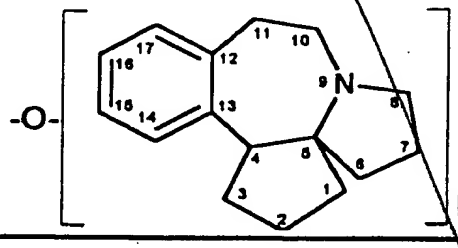
R^5, R^6 and R^8 are independently hydrogen;

hydrocarbon radical, saturated, [insaturated] unsaturated or aromatic, linear or [ramified] branched and/or cyclic, [especially alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, aryl, heterocycloalkyl, or said radical] optionally including [or not] heteroatom(s);

oxygen ether bearing one of the former radicals;

[CTX is as defined according to anyone of claims 1 to 3];

-O-CTX is cephalotaxine moiety of the following formula or a salt thereof:



where p is equal to 1 or 2;

the two types of radicals -Ω and -CTX above-mentioned being bonded with an ester bond -CO-O-

except for compounds where Z is oxygen atom and,

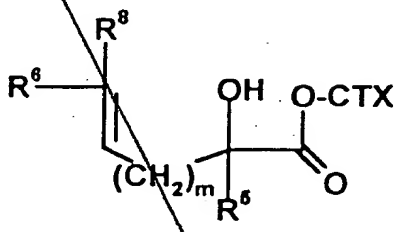
1°) n = 2 or 3, and simultaneously $R^6 = R^8$ = methyl and R^5 = OMe or hydroxyl,

1° n = 2 and simultaneously $R^6 = R^8$ = methyl and R^5 = OMe or hydroxyl;

a3cont.

3° n = 3 and simultaneously R^6 is hydroxyl, when R^8 is [methyl] methyl and R^5 is -$CH_2CO_2CH_3$ radical.

25. (Amended) A sidechain-bearing cephalotaxane corresponding to the following formula and/or a salt thereof:



where

m, R^5, R^6 and R^8 are as defined according to claim 1, and CTX is as defined according to [anyone of claims 1 to 3] claim 1,

except compound where m = 2, R^5 = $CH_2CO_2CH_3$, R^6 = R^8 = methyl and [CTX is as defined according to claim 3] -o-CTX is cephalotaxine, where R^1 is hydroxyl, R^2 is methoxyl, R^3 and R^4 are hydrogen.

Claim 27, line 5, delete "as";

Claim 27, lines 5-6, delete "anyone of claims 1 to 3" and insert --claim 1--;

Claim 34, line 1, delete "anyone of claims 1 to 21" and insert --claim 1--;

Claim 34, line 29, after "the said" insert --optionally--;

Claim 34, line 29, delete "or not";

Claim 34, line 30, delete "insaturated" and insert --unsaturated--;

Claim 34, line 30, delete "ramified" and insert --branched--;

Claim 34, lines 31-32, delete "especially alkyl, alkenyl, alkynl, cycloalkyl, cycloalkenyl, aryl, or heterocycloalkyl";

Claim 35, line 6, delete "preferably dichloromethane,";

Claim 35, line 10, delete "where n, CTX, R^5, R^6 et R^8 are defined according to claim 1";

Claim 36, line 1, delete "anyone of claims 1 to 21 and claim 34" and insert --claim 1--;

Claim 36, delete line 4;

Claim 36, line 6, delete "such as" and insert --wherein--;

Claim 36, line 9, delete "of";

Claim 36, line 9, delete "its" and insert --the--;

Claim 36, line 9, delete "form" and insert --forms--;

Claim 37, line 4, delete "where n, Z, R^6, R^8, and R^5 are as defined according to claim 1";

Claim 38, line 4, delete "where n, Z, R^6, R^8, and R^5 are as defined according to claim 1";

Claim 39, lines 4-5, delete "where n, R^5, R^6, R^8, Z, Q^2, Q^1, R^9, R^{10} and R^{11} are as defined according to claim 1".

Claim 40, line 1, delete "anyone of claims 36 to 39";

Claim 40, line 3, delete "such as Ω and Δ^* are as defined according to claim 36";

Claim 40, line 3, delete "the";

Claim 40, lines 5-6, delete "such as Δ* is as defined according to claim 36, according the process of the claim 1".

Claim 41, line 1, delete "anyone of claims 36 to 39" and insert --claim 36--;

Claim 41, lines 3-4, delete "such as Ω and Δ* are as defined according to claim 36";

Claim 41, line 4, delete "the";

Claim 41, lines 6-7, delete "such as Δ* is as defined according to claim 36, according the process of the claim 1".

Claim 42, line 1, delete "anyone of claims 36 to 39" and insert --claim 36--;

Claim 42, line 3, delete "such as Ω and Δ* are as defined according to claim 36";

Claim 42, line 3, delete "the";

Claim 42, lines 5-6, delete "such as Δ* is as defined according to claim 36, according the process of the claim 1".

Claim 43, line 1, delete "anyone of claims 36 to 39" and insert --claim 36--;

Claim 43, line 2, delete "just";

Claim 43, line 2, delete "of" and insert --an--;

Claim 43, line 3, delete "the either one or the other of the three" and insert --one of the--;

Claim 43, delete line 8;

Claim 44, line 1, delete "anyone of claims 36 to 39" and insert --claim 36--;

Claim 44, line 2, delete "labil" and insert --labile--;

Claim 45, line 1, delete "anyone of claims 36 to 39" and inset --claim 36--;

Claim 45, line 2, delete "labil" and insert --labile--;

Claim 54, line 1, delete "anyone of claims 1 to 21 and 34 to 49" and insert --claim 1--;

Claim 54, line 9, delete the period and inset -- ; --;

Claim 54, line 15, delete "is included between 1 and 8" and insert --range from t to 8--;

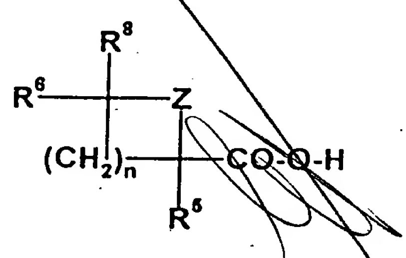
Claim 54, line 19, delete "more generally by the method of the start of art" and inset --by a method--;

Claim 55, line 2, delete "just take place" and insert --is conducted--;

Claim 58, line 1, delete "anyone of claims 54 to 57" and insert --claim 54--;

---

59. (Amended) The tertiary heterocycloalcane carboxylic acid, [included its salts and] or salt thereof or each one of its ure enantiomeric forms or [in] the racemic mixture or [in[the variable composition, corresponding to the following formula:



where n [is included between] ranges from 1 [and] to 8, [Z, R^5, R^6 and R^8 are as defined according to claim 1] Z is oxygen, nitrogen or sulfur heteroatom, R^5, R^6 and R^8 are

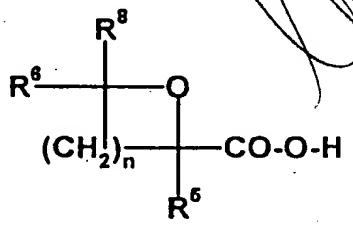
Q4 cont.

independently hydrogen, hydrocarbon radical, saturated, unsaturated or linear or branched and/or cyclic, optionally including heteroatoms, and R^5 is not hydrogen;

except for compounds where Z is oxygen atom and,

1°) n = 0 and R^5 is not $-CH_2CO_2H$ or $-CH_2CO_2CH_3$ radical;
2°) n = 0 and R^5 is $-CH_2CO_2H$ or $-CH_2CO_2CH_3$ radical, and $R^6 = R^8$ = methyl or $-CH_2CO_2H$ or $-CH_2CO_2CH_3$ radical;
3°) n = 2 and simultaneously $R^6 = R^8$ = methyl, and R^5 = OMe or hydroxyl ;
4°) n = 2 and simultaneously $R^6 = R^8$ = methyl, and R^5 is $-CH_2CO_2H$ or $-CH_2CO_2CH_3$ radical or methyl;
5°) n = 3 and simultaneously R^6 is hydroxyl, and R^8 is methyl, and R^5 is $-CH_2CO_2CH_3$ radical;
6°) n = 3 and simultaneously $R^6 = R^8$ = methyl and R^5 = OH or methyl or ethyl.

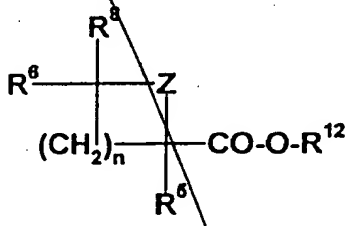
60. (Amended) The teritary oxacycloalcane carboxylic acid [included its salts and] or salt thereof or each one of its pure enantiomeric forms of [in] the racemic mixture of [in] the variable composition, according to claim 59 corresponding to the following formula:



Cont.

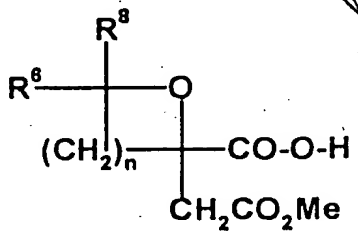
where n [is included between] ranges from 0 [and] to 8, R^5, R^6 and R^8 are as defined according to claim 59, but are not hydrogen simultaneously.

61. (Amended) The teritary heterocycloalcane carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture of [in] the variable composition according to claim 54, corresponding to the following formula:



[where n is included between 0 and 8, Z, R^5, R^6 and R^8 are as defined according to cliam 59,] and R^5 is not hydrogen [, and R^{12} is defined according to claim 54].

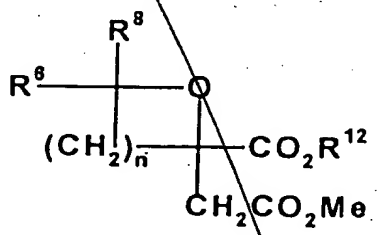
62. (Amended) The tertiary oxacycloalcane carboxylic hemiester, [included its salts and] or salt thereof or eachone of its pure enantiomeric forms of [in] the racemic mixture or [in] the variable composition according to claim 59, corresponding to the following formula:



4 cont.

[where n is included between 0 and 8, R^6 and R^8 are as defined according to claim 59].

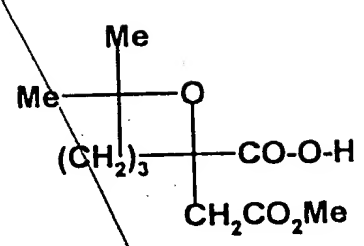
63. (Amended) The tertiary oxacycloalcane carboxylic hemiester, [included its salts and] or salt thereof or each one of its pure enantiomeric forms of [in] the racemix mixture of [in] the variable composition according to claim 54, corresponding to the following formula:



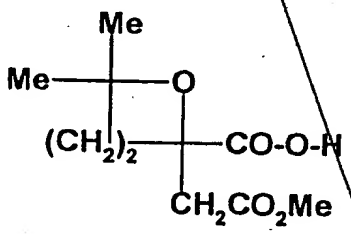
[where n is included between 0 and 8, R^6 and R^8 are as defined according to claim 59, R^{12} is defined according to claim 54].

64. (Amended) The tertiary oxacycloalcane carboxylic hemiester or anhydrohomoharringtonic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture of [in] the variable composition, corresponding to the following formula:

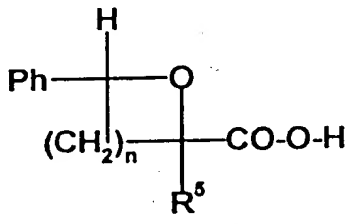
A2 cont.



65. (Amended) The tertiary oxacycloalcane carboxylic hemiester or anhydro-harringtonic acid, [icluded its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemix mixture or [in] the variable composition, according to claim 59 corresponding to the following formula:



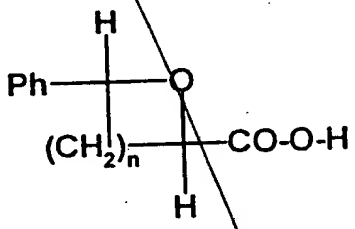
66. (Amended) The tertiary oxacycloalcane carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture or [in] the variable composition, corresponding to the following formula:



A4 cont.

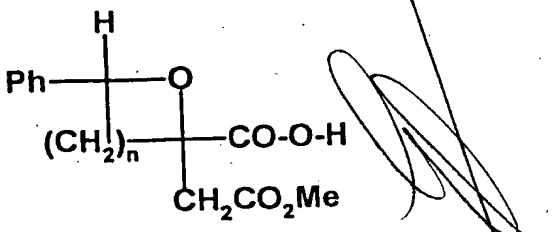
[where n is included between 0 and 8, R^5 is as defined according to claim 59].

67. (Amended) The tertiary oxacycloalcane carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture or [in] the variable composition, corresponding to the following formula:



where n [is included between] ranges from 1 [and] to 8.

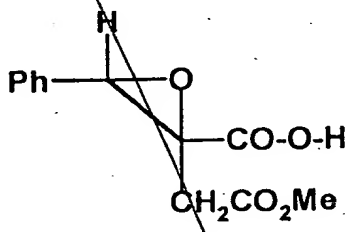
68. (Amended) The tertiary oxacycloalcane carboxyylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture or [in] the variable composition, corresponding to the following formula:



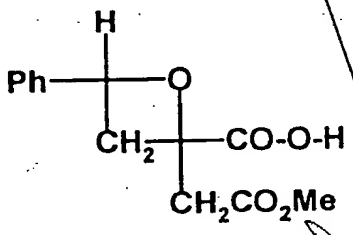
where n [is included between] ranges from 0 [and 8] to 8.

A4 cont.

69. (Amended) The tertiary6 oxacycloalcane carboxylic acid or oxanhydroneoharringtonic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemix mixture or [in] the variable composition, corresponding to the following formula:

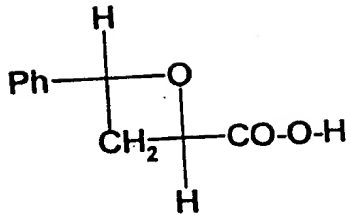


70. (Amended) The tertiary oxacycloalcane carboxylic acid or oxanhydroneohomoharringtonic acid, [included its salts and] or salt thereof or erach one of its pure enantiomeric forms or [in] the racemic mixture or [in] the variable composition, corresponding to the following formula:

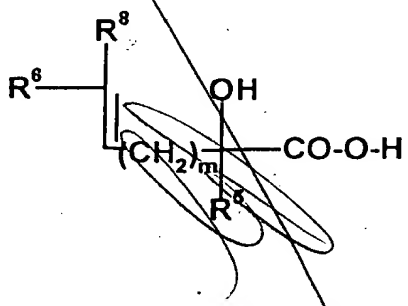


71. (Amended) The tertiary oxacycloalcane carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture or [in] the variable composition, corresponding to the following formula:

Q4 cont.



72. (Amended) the tertiary alkene carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture or [in] the variable composition, corresponding to the following formula:



where m [is included between] ranges from 1 [and] to 8, R^6 and R^8 are as defined according to claim 1, but are not hydrogen simultaneously, and R^5 is not hydrogen or heteroatom.

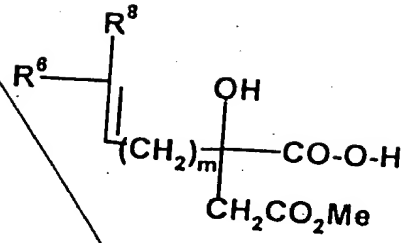
Claim 73, line 2, after "composition," insert --according to claim 54--;

Claim 73, delete lines 5, 6, and 7.

Q5

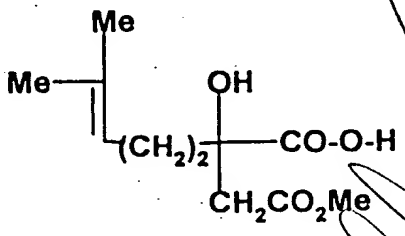
74. (Amended) The teritary alkene carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture or [in] the variable composition, according to claim 59 corresponding to the following formula:

a5 cont.



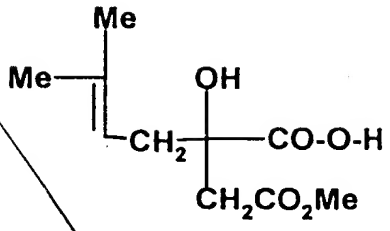
[where m is included between 1 and 8,] wherein R^6 and R^8 [are as defined according to claim 1 but] are not hydrogen.

75. (Amended) The tertiary alkene carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture or [in] the variable composition, corresponding to the following formula:

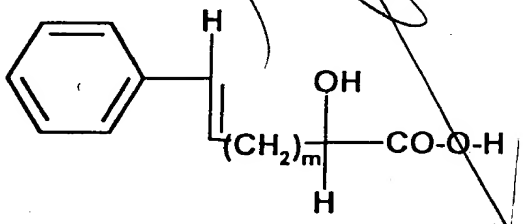


76. (Amended) The tertiary alkene carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the racemic mixture of [in] the variable composition, corresponding to the following formula:

A cont.



77. (Amended) The tertiary alkene carboxylic acid, [included its salts and] or salt thereof or each one of its pure enantiomeric forms or [in] the variable composition, corresponding to the following formula:



where m [is included between] ranges from 1 to 8.

A'

79. (Amended) The anhydrides of acid according to [anyone of claims 58 to 70] claim 58, of the [general] formula Ω-CO-O-CO-Ω where Ω is [as defined according to claim 1] a representative radical of the chain terminal moiety.

80. (Amended) The mixed anhydrides of acid according to [anyone of claims 58 to 70] claim 58, of the [general] formula Ω-CO-A where A is [as defined according to anyone of claims 12, 13 or 15] selected from substituents:

A6 cont.

methoxyformyloxy of formula MeOCOO-,

trifluoroacetyloxy of formula CF_3COO-,

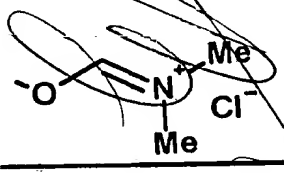
alkylsulfonoxy of formula RSO_3-,

phosphoxy of formula $(RO)_2PO$-,

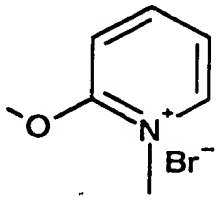
halophosphoxy of formula ROP(C1)O-,

trialkylsilyloxy of formula R_3SiO-,

dimethyl-formamidinium chloride of formula:



or acyloxy-pyridinium bromide of formula:

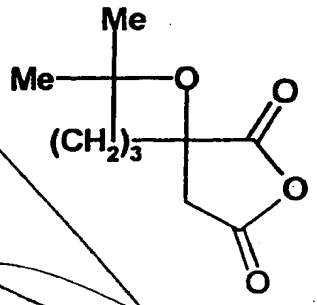


Claim 82, line 1, delete "anyone of claims 58 to 70" and insert --claim 58--;

Claim 82, line 2, delete "general".

a7

83. (Amended) The cyclic anhydrides corresponding to the following formula:



where [n, R^6 and R^8 are as defined according to claim 1] n ranges from 0 to 8, R^6 and R^8 are independently hydrogen, hydrocarbon radical, saturated, unsaturated or aromatic, linear or branched and/or cyclic optionally including heteroatoms.

Claim 85, line 1, delete "anyone of claims 1 to 21 and 34 to 49" and insert --claim 1--;

Claim 86, line 1, delete "anyone of claims 1 to 21 and 34 to 49" and insert --claim 1--;

Claim 86, line 3, delete "as a pharmaceutical use";

Claim 86, line 5, delete "named";

Claim 86, line 19, delete "especially making use of" and insert --using--;

Claim 86, lines 21-22, delete "preferably n-octadecylsilane,].